World Academy of Science, Engineering and Technology International Journal of Educational and Pedagogical Sciences Vol:16, No:10, 2022

Integrating Cooperative Education Experience into Engineering Curriculum: An Approach

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Abstract : The Center/Unit for Industry Engagement and Collaboration, as well as Internship, play a significant role at university. In general, the Center serves as the official interface between the industry and the School or Department to cultivate students' early exposure to professional experience. The missions of the Center are not limited to provide a communication channel and collaborative platform for the industries and the university but also to assist students to build up their career paths early while still in the university. In recent years, a cooperative education experience (commonly known as a co-op) has been strongly advocated for students to make the school-to-work transition. The nature of the co-op program is not only consistent with the internships/final year design projects, but it is also more industrial-oriented with academic support from faculty at the university. The purpose of this paper is to describe an approach to how cooperative education experience can be integrated into Engineering Curriculum. It provides a mutual understanding and exchange of ideas for the approach between the university and the industry. A suggested format in terms of timeline, duration, selection of candidates, students, and companies' expectations for the co-op program is described. Also, feedbacks from employers/industries show that a longer-term co-op program is well suited for students compared with a short-term internship. To this end, it provides a new insight into collaboration and/or partnership between the university and the industries to prepare professional work-ready graduates.

Keywords: cooperative education, industry, engagement, collaboration

Conference Title: ICEEP 2022: International Conference on Engineering Education and Practice

Conference Location : Athens, Greece **Conference Dates :** October 13-14, 2022